

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 18 (Currently amended) A method of preparing a multilayer phosphor product on a substrate comprising the steps of:

- (a) providing a solution comprising an alkoxide precursor and a dopant precursor;
- (b) mixing said solution with a solid particle precursor wherein said solid particle precursor has an average particle size of about 7 nm and wherein said solid particle precursor reacts;
- (c) inducing a sol-gel condensation reaction comprising said alkoxide precursor, said dopant precursor, and said solid particle precursor to form a sol-gel condensation reaction mixture;
- (d) spreading the sol-gel condensation reaction mixture on a substrate;
- (e) drying the sol-gel condensation reaction mixture;
- (f) ~~repeating steps (a) through (e) as needed to produce a desired thickness of film;~~
repeating steps (d) and (e) to produce a film; and
- (g) heating the ~~thick film to form a phosphor.~~

19. (original): The method according to claim 18, wherein said solution further comprises a hydrolysis agent.

20. (original): The method according to claim 18, wherein a hydrolysis agent is added after said step (b).

21. (original): The method according to claim 20, wherein said hydrolysis agent is added immediately before step (c).

22. (original): The method according to claim 18, wherein said solution further comprises a reagent capable of inhibiting condensation reactions before step (b) in said solution.

23. (original): The method according to claim 19, wherein said hydrolysis agent is selected from the group consisting of water, tetramethylammonium hydroxide, and mixtures thereof.

24. (original): The method according to claim 20, wherein said hydrolysis agent is selected from the group consisting of water, tetramethylammonium hydroxide, and mixtures thereof.

25. (original): The method according to claim 18, wherein said dopant precursor is an alkoxide, an acetate, an organometallic compound, an inorganic salt, or mixtures thereof.

26. (original): The method according to claim 18, wherein said solid particle precursor is silica, metal oxide, metal sulfide, metal oxysulfide, metal halide, metal carbonate, metal phosphate, metal sulfate, GeO_2 , pure metal or mixtures thereof.

27. (original): The method according to claim 26, wherein said solid particle precursor is fumed silica.